## WHAT IS CLAIMED IS:

5

10

15

- 1. Use in the preparation of a medicament for prophylaxis or treatment of an acute inflammatory disorder in a mammalian patient of an effective amount of pharmaceutically acceptable bodies carrying an effective number of phosphate-containing groups presented or presentable on the surface of said bodies, the phosphate-containing groups comprising a plurality of phosphate-glycerol groups or groups convertible to such groups, to inhibit and/or reduce the progression of the acute inflammatory disorder, said bodies being of a size from about 20 nanometers (nm) to 500 micrometers (µm).
- 2. Use as claimed in claim 1 wherein the acute inflammatory disorder features an upregulation of at least one pro-inflammatory cytokine.
- 3. Use as claimed in claim 2 wherein the pro-inflammatory cytokine is selected from TNF-α, INFγ, IL-1 and IL-12.
- 4. Use as claimed in claim 1 wherein the acute inflammatory disorder features a downregulation of at least one anti-inflammatory cytokine
- Use as claimed in claim 4 wherein the anti-inflammatory cytokine is selected from TGF-β, IL-10 and IL-4.
- Use as claimed in claim 5 wherein the anti-inflammatory cytokine is TGF-β.
  - 7. Use as claimed in any preceding claim wherein the bodies are essentially free of pharmaceutically active entities other than phosphate-containing surface groups.
- 25 8. Use as claimed in any preceding claim wherein the phosphate-glycerol groups constitute 60% 100% of the phosphate-containing surface groups on the bodies.
  - 9. Use as claimed in any preceding claim wherein the phosphate-glycerol groups correspond to the formula:
- 30 -O-P(=O)(OH)-O-CH<sub>2</sub>-CH(OH)-CH<sub>2</sub>-OH

10. Use as claimed in any preceding claim wherein the bodies are liposomes constituted to the extent of 60 - 100% by weight of a phosphatidyl glycerol phospholipid corresponding to the formula:

where R and  $R^1$  are independently selected from  $C_1 - C_{24}$  hydrocarbon chains, saturated or unsaturated, straight chain or containing a limited amount of branching wherein at least one chain has from 10 to 24 carbon atoms.

10

5

11. Use as claimed in any preceding claim wherein the acute inflammatory disorder is acute allergic or toxic reaction from surface contact with environmental allergen or drugs through anaphylactic shock.

15

12. Use as claimed in claim 11 wherein the acute inflammatory disorder is allergic contact dermatitis or acute hypersensitivity.

Use as claimed in any of claims 1-10 wherein the acute inflammatory

- 20
- 14. Use as claimed in any of claim 1-10 wherein the acute inflammatory disorder is acute neuronal injury resulting from cardiopulmonary bypass surgery.

disorder is acute neurological inflammatory injury.